

**WEST**

Generate Collection

L12: Entry 1 of 4

File: EPAB

Jan 2, 1992

PUB-NO: DE004020304A1

DOCUMENT-IDENTIFIER: DE 4020304 A1

TITLE: Temp. measuring system for cooled electronic component - has temp. sensor  
pref. on polyimide sensor foil

PUBN-DATE: January 2, 1992

INVENTOR-INFORMATION:

NAME

ROSE, THOMAS DR RER NAT

COUNTRY

DE

ASSIGNEE-INFORMATION:

NAME

SIEMENS AG

COUNTRY

DE

APPL-NO: DE04020304

APPL-DATE: June 26, 1990

PRIORITY-DATA: DE04020304A (June 26, 1990)

US-CL-CURRENT: 374/120

INT-CL (IPC): G01K 1/16; G01K 7/00

EUR-CL (EPC): G01K013/00

ABSTRACT:

A temp. measuring arrangement for electronic components (6), which are cooled by contact with a coolant, comprises (a) a temp. sensor (5), mounted on the contact face between the component (6) and the coolant and accommodated in a recess in the coolant (pref. a heat sink plate, 1); and (b) thermal insulation between the sensor (5) and the coolant. Pref. the sensor is a thin film, temp.-dependent resistive sensor (5) provided on a sensor foil (4) of polyimide. ADVANTAGE - Reliable, accurate temp. measurements are obtd. with insignificant effect on component cooling.

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L10: Entry 1 of 1

File: DWPI

Sep 10, 1998

DERWENT-ACC-NO: 1998-481950  
DERWENT-WEEK: 199931  
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TITLE: Junction temperature determination for semiconductor component - involves using temperature sensor on carrier body next to component, and electrically connected with pin of component by specially shaped conductor path

INVENTOR: ALWON, H

PATENT-ASSIGNEE:

ASSIGNEE	CODE
TEMIC TELEFUNKEN MICROELECTRONIC GMBH	TELE
ALCATEL ALSTHOM CIE GEN ELECTRICITE	COGE

PRIORITY-DATA: 1997DE-1008653 (March 4, 1997)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE 19708653 A1	September 10, 1998		004	G01K007/01
DE 19708653 C2	July 8, 1999		000	G01K007/22
WO 9839803 A2	September 11, 1998	G	000	H01L027/02

DESIGNATED-STATES: HU JP US AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
DE 19708653A1	March 4, 1997	1997DE-1008653	
DE 19708653C2	March 4, 1997	1997DE-1008653	
WO 9839803A2	March 4, 1998	1998WO-EP01569	

INT-CL (IPC): G01 K 7/01; G01 K 7/22; H01 L 25/16; H01 L 27/02

ABSTRACTED-PUB-NO: DE 19708653A

BASIC-ABSTRACT:

The method involves determining the junction temperature of at least one housed semiconductor component (4) of a circuit arrangement. The semiconductor component is arranged on a carrier body (1), which has a low thermal conductivity. A temperature sensor (6) is arranged on the carrier body, next to the semiconductor component, and is electrically connected to a pin (5) of the semiconductor component using a specially shaped conductor path (8).

The semiconductor component and the temperature sensor are preferably arranged on the same face (12) of the carrier body. The shape of the electrical conductor path is modelled using the isotherms of the heat dissipation of the semiconductor component. The carrier body is preferably formed as a printed circuit board.

USE - For thermal protection of component.

ADVANTAGE - Assures accurate determination of junction temperature, taking into

account thermal coupling between component and heat sink.

CHOSEN-DRAWING: Dwg.1/1

TITLE-TERMS: JUNCTION TEMPERATURE DETERMINE SEMICONDUCTOR COMPONENT TEMPERATURE  
SENSE CARRY BODY COMPONENT ELECTRIC CONNECT PIN COMPONENT SHAPE CONDUCTOR PATH

DERWENT-CLASS: S03 U11 U13

EPI-CODES: S03-B01E9; U11-F01; U13-E01;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N1998-375906

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L2: Entry 1 of 2

File: EPAB

Aug 17, 2000

PUB-NO: DE019852080C1

DOCUMENT-IDENTIFIER: DE 19852080 C1

TITLE: Monitoring temperature of electronic component with losses, especially power device, involves detecting cooling body or coolant temperature after power loss change, adding computed difference value

PUBN-DATE: August 17, 2000

## INVENTOR-INFORMATION:

NAME

CORNELIUS, PETER

COUNTRY

DE

## ASSIGNEE-INFORMATION:

NAME

TRW AUTOMOTIVE ELECTRON &amp; COMP

COUNTRY

DE

APPL-NO: DE19852080

APPL-DATE: November 11, 1998

PRIORITY-DATA: DE19852080A (November 11, 1998)

INT-CL (IPC): G01 K 3/08; H01 L 23/34; H05 K 7/20

EUR-CL (EPC): G01K007/42

## ABSTRACT:

The method involves detecting the temperature ( Tmess) of the cooling body or coolant at a detection point that reaches equilibrium temperature after a change in power loss with a time constant greater than that with which the component reaches its equilibrium temperature The temperature of the component is determined by the addition of a temperature difference value to the detected temperature The difference value is computed using a pre-existing relationship to the power loss or on power loss and the time difference after a change in power loss. An Independent claim is also included for an arrangement for monitoring the temperature of an electronic component with losses, especially a power semiconductor.

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## Freeform Search

Database:

US Patents Full-Text Database  
 US Pre-Grant Publication Full-Text Database  
 JPO Abstracts Database  
 EPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Term:

identify defective sensor

 Display:  Documents in Display Format:  Starting with Number

 Generate: ☐ Hit List ☒ Hit Count ☐ Side by Side ☐ Image

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Cases

## Search History

 DATE: Thursday, July 03, 2003 [Printable Copy](#) [Create Case](#)

update

Set Name Query

side by side

Hit  
CountSet  
Name  
result set
 DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES;  
 OP=ADJ

<u>L40</u>	identify defective sensor	7	<u>L40</u>
<u>L39</u>	detect defective sensor	6	<u>L39</u>
<u>L38</u>	detect abnormal sensor	16	<u>L38</u>
<u>L37</u>	identify abnormal sensor	3	<u>L37</u>
<u>L36</u>	L1 and "identify abnormal"	3	<u>L36</u>
<u>L35</u>	L34 and "temperature sensor"	154	<u>L35</u>
<u>L34</u>	(sensor failure) and (calibration)	387	<u>L34</u>

<u>L33</u>	(detector failure) and (measured temperature) and (estimated temperature)	0	<u>L33</u>
<u>L32</u>	(sensor failure) and (measured temperature) and (estimated temperature)	1	<u>L32</u>
<u>L31</u>	compare measured and estimated temperatures	16	<u>L31</u>
<u>L30</u>	compared measured and estimated data	9	<u>L30</u>
<u>L29</u>	L28 and "compare estimate temperature"	0	<u>L29</u>
<u>L28</u>	L1 and "measure temperature"	3295	<u>L28</u>
<u>L27</u>	L26 and "temperature transistor"	13	<u>L27</u>
<u>L26</u>	cooling transistor	101	<u>L26</u>
<u>L25</u>	cooling transistor	0	<u>L25</u>
<u>L24</u>	L21 and "coolant"	7	<u>L24</u>
<u>L23</u>	L21 and "cooling temperature"	5	<u>L23</u>
<u>L22</u>	L21 and "coolant temperature"	1	<u>L22</u>
<u>L21</u>	transistor temperature	1246	<u>L21</u>
<u>L20</u>	(transistor tmperature) and (coolant temperature)	0	<u>L20</u>
<u>L19</u>	(transistor temperature) and (coolant temperature)	0	<u>L19</u>
<u>L18</u>	L16 and "failed sensor"	10	<u>L18</u>
<u>L17</u>	L16 and "malfunctioning sensor"	2	<u>L17</u>
<u>L16</u>	L15 and "calibration"	1220	<u>L16</u>
<u>L15</u>	L1 and "temperature sensor"	5577	<u>L15</u>
<u>L14</u>	L1 and "reference temperature sensor"	57	<u>L14</u>

*DB=PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ*

<u>L13</u>	3715231	3	<u>L13</u>
<u>L12</u>	4020304	4	<u>L12</u>
<u>L11</u>	04020304	2	<u>L11</u>
<u>L10</u>	19708653	1	<u>L10</u>

*DB=DWPI; PLUR=YES; OP=ADJ*

<u>L9</u>	(1052080) and (1998)	2	<u>L9</u>
<u>L8</u>	1052080	9	<u>L8</u>

*DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=ADJ*

<u>L7</u>	L6 and "power semiconductor"	6	<u>L7</u>
<u>L6</u>	L5 and "temperature"	2501	<u>L6</u>
<u>L5</u>	Cornelius	7599	<u>L5</u>
<u>L4</u>	L3 and "temperature"	17	<u>L4</u>
<u>L3</u>	Cornelios	63	<u>L3</u>

*DB=JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ*

L2 19852080

2 L2

*DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES;  
OP=ADJ*

L1 374/\$

25621 L1

END OF SEARCH HISTORY

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L1: Entry 1 of 1

File: JPAB

Aug 20, 1996

PUB-NO: JP408211881A

DOCUMENT-IDENTIFIER: JP 08211881 A

TITLE: WHISLE HAVING TONE COLOR CHANGING ROTARY BODY

PUBN-DATE: August 20, 1996

## INVENTOR-INFORMATION:

NAME

COUNTRY

SERON, SUREN V

## ASSIGNEE-INFORMATION:

NAME

COUNTRY

SERON MFG CO

APPL-NO: JP07278230

APPL-DATE: October 3, 1995

INT-CL (IPC): G10 K 5/00

## ABSTRACT:

PROBLEM TO BE SOLVED: To provide a multiple tone color type whistle which can selectively change tone color and pitch and can return them to a former tone color or can change them further by selectively positioning a closing body in, a desired one of specific positions.

SOLUTION: A body part 10 contains a blowing port 12 and two resonance chambers 14 and 16 of a cylindrical shape as a whole, and the two chambers 14 and 16 are separated from each other by a partition wall 18 whose whole is positioned in the center. Here, plural tone color changing holes 36 are also arranged in the body part 10, and these hole 36 extend by penetrating through a wall of the body part 10, and reach the resonance chamber 16 related to an opening part 28. Therefore, the chamber 16 fluidly communicates with the tone color changing holes 36. When desired, the tone color changing holes 36 can be fluidly communicated with the cylindrical resonance chamber 14 related to an opening part 26. Or the holes 36 can be fluidly communicated with both chambers 14 and 16.

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